



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/702,646	11/07/2003	Tetsuro Tojo	244779US3	3064
22850	7590	08/10/2007	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			PATEL, TAYAN B	
1940 DUKE STREET			ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22314			1753	
NOTIFICATION DATE		DELIVERY MODE		
08/10/2007		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/702,646	TOJO ET AL.	
Examiner	Art Unit		
Tayan Patel	1753		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 07 November 2003.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-5 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-5 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 07 November 2003 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892) .  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6/7/07.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .  
5)  Notice of Informal Patent Application  
6)  Other: \_\_\_\_ .

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Tojo et al. (WO01/77412)(US 6818105 is the English language equivalent from where citations will be referenced).

With regard to claims 1 and 4, Tojo et al. discloses a fluorine gas generator for generating fluorine gas by electrolysis of a mixed molten-salt comprising hydrogen fluoride, the fluorine gas generating apparatus comprising an electrolytic cell, 3, equipped with (See column 6, lines 1-24; See also figure 1):

a hydrogen fluoride gas feed line for feeding hydrogen fluoride gas into an electrolytic bath (line in figure 1 that leads into the inlet port, 15 or 17, due to a continuous feed OR line 26) (See column 10, lines 57-67),

a first automatic valve, 53, disposed on said hydrogen gas feed line and capable of being closed on the occasion of interruption of hydrogen fluoride gas feeding (See column 7, lines 18-30), and

an inert gas substitution means (absorption tower, 24, filled with NaF and the like to eliminate HF from the fluorine gas in addition to a pressuring cylinder, 18, that provides/substitutes an inert gas) (See column 6, lines 10-24; See also column 7, lines 45-57) located downstream in relation to the first valve on said HF gas feed line (See figure 1) on the occasion of interruption/in case of emergency of HF gas feeding.

With regard to claim 2, Tojo et al. further discloses a detecting means, 8 and 9 (level probes), for detecting an interruption of feeding of the HF gas (See column 7, lines 8-17),

an inert gas feed line (line in figure 1 that leads from the pressuring cylinder, 18, to the anode chamber, 5) for feeding the inert gas to said hydrogen fluoride gas feed line on the side downstream from said first automatic valve,

a second automatic valve, 62 (See column 7, lines 25-35), disposed on said inert gas feed line and operated in association with said detecting means to feed the inert gas into said line on the side downstream from said first automatic valve on said HF gas feed line. See figure 1.

With regard to claims 3 and 5, Tojo et al. further discloses an inert gas storage tank, 18, for storing the inert gas to be fed to the inert gas feed line. See column 7, lines 45-57.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tayan B. Patel, Esq. whose telephone number is (571) 272-9806. The examiner can normally be reached on Monday-Thursday, 7:30-5:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Neckel D. Alexa can be reached on (571) 272-1446. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

\*\*\*

TBP

*TBP*

*Alexa Neckel*  
ALEXA D. NECKEL  
SUPERVISORY PATENT EXAMINER